

Colorado Parks and Wildlife Report – Preliminary Water Quality Data – Saturday, August 8, 2017.

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Internal Use

Spill reported to happen 1030 or 1040 am on Wednesday, August 5th

Date	Location/Event	Time	pH	Alkalinity mg/l CaCO³	Hardness mg/l CaCO³	Other samples collected
8/5/2015	Hatchery Free Flow	2300		No data	No data	Total metal sample
8/5/2015	Animas- at Hatchery	2300		No data	No data	Total metal sample
8/6/2015	Sentinel Fish cages placed at 32 nd , Hatchery, Junction Cr and High Br 1130 am to 1400 pm					
8/6/2015	Animas – 32nd	1630	7.30	78	156	Total and Dissolved metal
8/6/2015	Animas – Hatchery	1630	7.95	78	166	Total and Dissolved metal
8/6/2015	Animas—High Br	1700	8.49	76	158	Total and Dissolved metal
8/6/2015	Junction Cr - Control	1800	8.37	164	174	Total and Dissolved metal
8/6/2015	Hatchery Free Flow	2308	7.35 field	242	258	Total and Dissolved metal
8/6/2105	Front of plume arrives at Hatchery about 21:45					
8/6/2105	Animas – Hatchery	2020	7.43	80	164	Total and Dissolved metal
8/6/2105	Animas – Hatchery	2215	7.43	70	164	Total and Dissolved metal
8/7/2015	Animas – Hatchery	0100	6.75 field 7.32 lab	30	206	Total and Dissolved metal
8/7/2015	Animas – Hatchery	0500	7.4 field 7.32 lab	54	172	Total and Dissolved metal
8/7/2015	Hatchery Free Flow	0120		244	248	
8/7/2015	Hatchery Free Flow	1550		242	268	

Initial observations:

- Hatchery Free Flow seems unaffected, field water chemistry shows no affect after 18 hours of exposure to plume.
- pH at hatchery drops after plume front hits, hits low at 0100 sample, this indicate a peak in the plume
- Alkalinity drops at Hatchery 0100
- Hardness increase at Hatchery 0100
- At 0500 sample, pH, alkalinity increase and hardness decreasing but no at pre plume levels yet

We adjusted strategy and prepared to sample water at each sentinel cage pm Friday 7th, am/pm Saturday 8th and am/pm Sunday 9th. Will fill in these results as they are analyzed.

Date	Location/Event	Time	pH	Alkalinity mg/l CaCO ₃	Hardness mg/l CaCO ₃	Other samples collected
8/7 pm	Animas – 32nd					
	Animas – Hatchery					
	Animas—High Br					
	Junction Cr - Control					
8/8 am	Animas – 32nd					
	Animas – Hatchery					
	Animas—High Br					
	Junction Cr - Control					
8/8 pm	Animas – 32nd					
	Animas – Hatchery					
	Animas—High Br					
	Junction Cr - Control					
8/9 am	Animas – 32nd					
	Animas – Hatchery					
	Animas—High Br					
	Junction Cr - Control					
8/9 pm	Animas – 32nd					
	Animas – Hatchery					
	Animas—High Br					
	Junction Cr - Control					

The plume is predicted at this writing to be through town by end of Sunday. We will adjust sampling based on what is happening and attempt to

sample as long as fish are in sentinel cages and surviving.

In addition to this sampling, River Watch sampled its normal 15 stations on the Animas that span from Weaselskin Bridge (about 15 miles south of Durango) and into Silverton, including several tributaries and the sentinel fish sites, minus Junction Creek. This sampling took place on 8/7/2015 from 1730 through 1530. This data includes pH, Alkalinity, Hardness and total/dissolved metals samples and nutrient samples on lower stations.

Metals data will be included when available. A summary report will be provided that includes all sampling and operating procedure. River Watch employees Colorado Department of Public Health and Environment protocols.